PORTLAND HARBOR CLEANUP MESSAGING
(3-17-16)

- **HEALTH RISK:** There are high levels of PCBs, dioxins/furans, and other contaminants at many sites along the Willamette River that present unacceptable risk to human health and to the environment that require cleanup.

- **PROCESS**: After 15-plus years of studying the river's pollution with the Lower Willamette Group and the state, the EPA is entering the final phase of its process to develop a plan that mirrors Oregonian's vision for a cleaner, healthier working waterfront.

- **EPA'S PLAN**: EPA will eventually select a cleanup plan that protects human health and the environment, is cost effective and, prescribes permanent cleanup solutions where possible.

- **REDUCING RISK**: The goal of our plan will be to reduce pollution exposure risk to levels that will allow all but the most sensitive people safely eat more fish from the river more often; make it safer for people to swim and otherwise play on the river banks and beaches and protect workers from high concentrations of toxins.

- **CLEANUP COSTS**: The plan we ultimately deliver will be achievable and affordable for those required to pay for cleanup.

- **ECONOMIC BENEFIT**: Cleanup of the polluted river sediment and upland properties will bring important economic benefits to the Portland area including well-paid construction jobs during the cleanup and by providing more certainty regarding potential re-development of riverfront properties.

- **HEALTH RISKS**: There are high levels of PCBs, dioxins/furans, and other contaminants in many areas along the lower Willamette River that present unacceptable risk to human health and to the environment that require cleanup.

    - Portland Harbor is one of the largest Superfund sites in the nation.
    - Contaminants and contaminant levels and environmental conditions vary throughout the site. There are "hotspots" where toxic levels in sediments and soils are very high and large areas where concentrations and risks are lower.
    - The river system is very dynamic with strong currents in some areas, large vessel traffic in the navigation channel, with a wide variety of land uses along the riverbank, ranging from parks to wildlife habitat to heavy industrial sites.
    - People swim, fish, canoe and work on, in and adjacent to the river.
    - The Portland Harbor Superfund site has a variety of contaminants – including PCBs, pesticides and dioxins/furans -- on the bed and banks of the river that took more than 100 years to accumulate in the sediments, fish and shellfish.
    - People may be exposed to these contaminants in and along the river shoreline in various ways such as: recreational activities or working on the docks or shore, eating fish caught from the river, or indirect exposure through consuming breast milk from mothers who may have been exposed
    - Resident fish found in Portland Harbor, including bass, carp and catfish currently pose an unacceptable health risk to those who catch and eat them, and the fish consumption warnings posted by the Oregon Health Authority around the Harbor are testimony to the risk.
    - The EPA has determined the greatest health risk from the contaminants in Portland Harbor is to those eating resident fish, and to infants breast-fed by mothers who regularly eat them.
    - The estimated cancer risks at Portland Harbor due to resident fish consumption are as high as 1 in 100, 100 times higher than EPA's "action level" of 1 in 10,000.
    - Exposure estimates for infants who consume breast milk from mothers exposed to contaminants are as much as 10,000 times greater than what is considered safe.
    - Health risks from consumption of resident fish are at least 100 times greater than any other exposures evaluated at Portland Harbor.
    - In addition, direct contact exposure to contaminated in-water sediment may pose an unacceptable risk to tribal fishers, particularly in the area along the west side of the river, between River Miles 6 (St. John's Bridge) and 7 (Railroad Bridge).

- **PROCESS**: **After 15-plus years of studying the river's pollution with the Lower**

Willamette Group and the state, the EPA is entering the final phase of its process to develop a plan that mirrors Portlanders' vision for a cleaner, healthier working waterfront.

- The site was added to the National Priorities (or Superfund) List in December 2000.
- Shortly after that we signed an agreement with ODEQ to work together the cleanup of the Portland Harbor site.
- We have now completed the Feasibility Study, or detailed analysis of the location, concentration and impact of harmful contaminants.
- In early April we will publish a proposed cleanup plan for public review and comment
- By the end of the year we will finalize the cleanup plan.
- We have been working with the community and conducting outreach for many years, additionally we have been providing grant funding to support a Community Advisory Group to help people become informed about the site and the process before this formal comment period begins.

- **PLAN: EPA has selected a cleanup plan that protects human health and the environment, is cost effective and prescribes permanent solutions.**

  - Under the Superfund law, EPA is responsible for developing and implementing a cleanup plan that reduces the risk of toxic exposures to people in and around the Lower Willamette.
  - There is not one, easy solution to this highly complex site.
  - Since late August, when we completed our draft Feasibility Study -- a set of studies that tell us about the location, concentration and impact of harmful contaminants -- the EPA has received comments from the tribes, the state, the city, community partners and the Lower Willamette Group.
  - We have also received input from our national experts at EPA's Remedy Review Board and the Contaminated Sites Technical Advisory Group, which met last November in Portland to receive input from the State, the tribes, the Portland Harbor Citizen's Advisory Group and the Lower Willamette Group.
  - This information and subsequent conversations have further refined the cleanup options at the 13 "hot spots" where much of the active cleanup work will be done, such as dredging, capping, and processes such as "enhanced natural recovery,' "Monitored Natural Recovery and "Treatment."
  - We have developed a cleanup plan that balances risk reduction with other criteria we're required to consider, such as effectiveness and permanence, implementability, and a preference for treatment;
  - Our proposed plan will provide more certainty that cleanup goals will be reached through a combination of active remediation and natural recovery in a reasonable

amount of time, with less uncertainty that more cleanup would be required in the future;
- It will be cost-effective;
- It will be compatible with future land uses without adding significant restrictions to the waterway;
- And it will strike the right balance to get the river back to productive use by industry, people, fish and wildlife.
- Active remediation in hot spot areas will sufficiently reduce contaminant concentrations in the river so that less invasive measures, such as monitored natural recovery (including dispersal and deposition of cleaner sediments from upstream) may further reduce the overall contaminant concentrations to background levels.
- It's important to note that a few hot spot areas have already been addressed under Superfund in some areas that were determined to be greatest threat to people. (McCormick Baxter)

- **RISK REDUCTION: The goal of our plan will be to reduce pollution exposure risk to levels that will allow most people to eat resident fish from the river and play on its banks and beaches more often;**

  - By cleaning up the river and nearby shoreline, we will reduce the risk
  - We have been working with Oregon Department of Environmental Quality to prevent further contamination from entering the river
  - We have the data we need to make decisions now.
  - If we delay, people and wildlife continue to be at risk, and costs continue to rise.
  - We know there are many diverse groups continuing to use the river, and fishing there. Some of these people are fishing despite signs advising against eating the river's resident fish because they can't afford other protein sources and thus Environmental Justice is a priority.

- **CLEANUP COSTS: The plan we ultimately deliver will be achievable and affordable for those required by the Superfund law to pay for cleanup.**

  - The current range of costs for cleanup options the EPA is considering is between $XXX million and $XX billion.
  - Under the Superfund law's "polluter pays" policy, EPA identifies parties that may be responsible for the contamination at the site, and by law this includes owners, operators, transporters and disposers of hazardous waste at the site.
  - So far, we have identified over 150 potentially responsible parties in and around Portland Harbor including local businesses, the Oregon Dept of State Lands, ODOT, as well as local, state and federal governments.
  - Most Superfund projects are completed through a legal agreement for cleanup activities

and costs with potentially responsible parties
- Our preference is to achieve such a settlement, however, we do have enforcement tools if settlement cannot be reached.

- **ECONOMIC BENEFIT: Cleanup of the polluted river sediment and upland properties will bring important economic benefits to the Portland area.**

  - Cleanup will allow for increased recreational and other river uses, including: navigation, industry, commerce and jobs.
  - There is significant benefit to getting derelict commercial properties back in productive use.
  - The entire area benefits from a cleaner, healthier and more beautiful harbor.
  - Superfund cleanups typically bring well-paying cleanup and contracting jobs
  - The City of Portland's own recent study showed that:

    - *"Cleanup will inject new spending into the Portland regional economy."*
    - *"The majority of dollars spent will stay in the Portland economy."*
    - *"New spending supports additional employment in the Portland economy."*
    - *"Every dollar of new spending creates more than one dollar of additional spending in the Portland economy."*

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